

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

IN THE MATTER OF:

**Caterpillar Inc.
8826 West Route 24
Mapleton, IL 61547**

ATTENTION:

**Junling Qiu
EHS Supervisor**

Request to Provide Information Pursuant to the Clean Air Act

The U.S. Environmental Protection Agency is requiring Caterpillar Inc. (Caterpillar or you) to submit certain information about the facility at 8826 West Route 24, Mapleton, Illinois. Appendix A provides the instructions needed to answer this information request, including instructions for electronic submissions. Appendix B specifies the information that you must submit. You must send this information to us within 30 calendar days after you receive this request.

We are issuing this information request under Section 114(a) of the Clean Air Act (the CAA), 42 U.S.C. § 7414(a). Section 114(a) authorizes the Administrator of EPA to require the submission of information. The Administrator has delegated this authority to the Director of the Air and Radiation Division, Region 5.

Caterpillar owns and operates an emission source at the Mapleton, Illinois facility. We are requesting this information to determine whether your emission source is complying with the Illinois State Implementation Plan and 40 C.F.R. Part 63 Subpart EEEEE.

Caterpillar must send all required information to:

Attn: Compliance Tracker, AE-17J
Air Enforcement and Compliance Assurance Branch

U.S. Environmental Protection Agency
Region 5
77 W. Jackson Boulevard
Chicago, Illinois 60604

Caterpillar must submit all required information under an authorized signature with the following certification:

I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are, to the best of my knowledge and belief, true and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to Section 113(c)(2) of the Clean Air Act and 18 U.S.C. §§ 1001 and 1341.

As explained more fully in Appendix C, you may assert a claim of business confidentiality under 40 C.F.R. Part 2, Subpart B for any part of the information you submit to us. Information subject to a business confidentiality claim is available to the public only to the extent, and by means of the procedures, set forth at 40 C.F.R. Part 2, Subpart B. If you do not assert a business confidentiality claim when you submit the information, EPA may make this information available to the public without further notice. You should be aware, moreover, that pursuant to Section 114(c) of the CAA and 40 C.F.R. § 2.301(a) and (f), emissions data, standards and limitations are not entitled to confidential treatment and shall be made available to the public notwithstanding any assertion of a business confidentiality claim. Appendix C provides additional information regarding the meaning and scope of the term "emissions data."

This information request is not subject to the Paperwork Reduction Act, 44 U.S.C. § 3501 *et seq.*, because it seeks collection of information from specific individuals or entities as part of an administrative action or investigation.

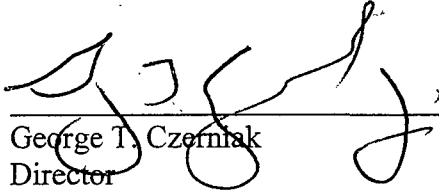
We may use any information submitted in response to this request in an administrative, civil or criminal action.

Failure to comply fully with this information request may subject Caterpillar to an enforcement action under Section 113 of the CAA, 42 U.S.C. § 7413.

You should direct any questions about this information request to Scott Connolly at 312 – 886-1493.

Date

2/3/16


George T. Czerniak
Director
Air and Radiation Division

Appendix A

When providing the information requested in Appendix B, use the following instructions and definitions.

Instructions

1. Provide a separate narrative response to each question and subpart of a question set forth in Appendix B.
2. Precede each answer with the number of the question to which it corresponds and at the end of each answer, identify the person(s) who provided information used or considered in responding to that question, as well as each person consulted in the preparation of that response.
3. Indicate on each document produced, or in some other reasonable manner, the number of the question to which it corresponds.
4. When a response is provided in the form of a number, specify the units of measure of the number in a precise manner.
5. Where information or documents necessary for a response are neither in your possession nor available to you, indicate in your response why the information or documents are not available or in your possession, and identify any source that either possesses or is likely to possess the documents or information.
6. If information not known or not available to you as of the date of submission later becomes known or available to you, you must supplement your response. Moreover, should you find at any time after the submission of your response that any portion of the submitted information is false or incorrect, you must notify EPA as soon as possible.

Electronic Submissions

To aid in our electronic recordkeeping efforts, we request that you provide all documents responsive to this information request in an electronic format according to paragraphs 1 through 6, below. These submissions are in lieu of hard copy.

1. Provide all responsive documents in Portable Document Format (PDF) or similar format, unless otherwise requested in specific questions. If the PDFs are scanned images, perform at least Optical Character Recognition (OCR) for "image over text" to allow the document to be searchable. Submitters providing secured PDFs should also provide unsecured versions for EPA use in repurposing text.
2. When specific questions request data in electronic spreadsheet form, provide the data and corresponding information in editable Excel or Lotus format, and not in image format. If Excel or Lotus formats are not available, then the format should

allow for data to be used in calculations by a standard spreadsheet program such as Excel or Lotus.

3. Provide submission on physical media such as compact disk, flash drive or other similar item.
4. Provide a table of contents for each compact disk or flash drive containing electronic documents submitted in response to our request so that each document can be accurately identified in relation to your response to a specific question. *We recommend the use of electronic file folders organized by question number.* In addition, each compact disk or flash drive should be labeled appropriately (e.g., Company Name, Disk 1 of 4 for Information Request Response, Date of Response).
5. Documents claimed as confidential business information (CBI) must be submitted on separate disks/drives apart from the non-confidential information. This will facilitate appropriate records management and appropriate handling and protection of the CBI. Please follow the instructions in Appendix C for designating information as CBI.
6. Certify that the attached files have been scanned for viruses and indicate what program was used.

Definitions

All terms used in this information request have their ordinary meaning unless such terms are defined in the CAA, 42 U.S.C. §§ 7401 *et seq.*

1. The terms “document” and “documents” shall mean any object that records, stores, or presents information, and includes writings, memoranda, records, or information of any kind, formal or informal, whether wholly or partially handwritten or typed, whether in computer format, memory, or storage device, or in hardcopy, including any form or format of these. If in computer format or memory, each such document shall be provided in translation to a form useable and readable by EPA, with all necessary documentation and support. All documents in hard copy should also include attachments to or enclosures with any documents.
2. The terms “relate to” or “pertain to” (or any form thereof) shall mean constituting, reflecting, representing, supporting, contradicting, referring to, stating, describing, recording, noting, embodying, containing, mentioning, studying, analyzing, discussing, evaluating or relevant to.
3. The term “capture system” shall mean the collection of components used to capture gases and fumes released from one or more emissions points and then to convey the captured gas stream to a control device or to the atmosphere. A capture system may include, but is not limited to, the following components or

equipment as applicable to a given capture system design: duct intake devices, hoods, enclosures, ductwork, dampers, manifolds, plenums, and fans.

4. The term "melting area" shall mean the production area containing induction furnaces used to melt scrap metal and includes all equipment listed in section 7.1 of Caterpillar's Title V permit issued in 2003. This also includes all equipment moved into the area since the Title V permit was issued.

Appendix B

Information You Are Required to Submit to EPA

Caterpillar Inc. must submit the following information about the Facility pursuant to Section 114(a) of the CAA, 42 U.S.C. § 7414(a), within 30 days of receiving this request.

1. Provide a copy of all permit applications submitted to Illinois Environmental Protection Agency (IEPA) since January 2006. Also provide a copy of the original permit application for the current Title V Permit for the Facility.
2. Provide copies of any deviation, excess emissions reports, or startup, shutdown, and malfunction reports for the facility submitted to IEPA or EPA since January 1, 2011.
3. Provide copies of all quarterly reports, semi-annual compliance reports, or equivalent documents for the facility submitted to either IEPA or EPA since January 1, 2011.
4. Provide copies of all annual emissions reports submitted to IEPA for the facility from January 1, 2011 to the present, and include:
 - a. a narrative describing the method used for the annual emissions calculations for each pollutant, including the basis of any emissions factors used and;
 - b. any documents outlining procedures for calculating annual emissions; and
 - c. a table describing the assumed/estimated capture efficiencies for each control device(s) and the associated emission unit(s), including any associated documentation used in developing the capture efficiencies.
5. Provide, in Microsoft Excel or other compatible format, a spreadsheet showing monthly emissions for each operational emission unit in the melting area for: Particulate Matter (PM) (lb/hr, tons/year), lead (lb/hr, tons/year), nitrogen oxides (NO_x) (lb/hr and tons/year), carbon monoxide (lb/hr, tons/year), and volatile organic matter (VOM) (lb/hr, tons/year), from January 1, 2011 to the date of this request. Also include a detailed explanation of the methods used to determine the total emissions for each pollutant, any and all associated calculations, and emission factors. Clearly indicate the source of any emission factors used in these calculations (i.e. manufacturer, AP-42, etc.) If a manufacturer-provided factor is used, provide the document or documents which indicate, describe, or note the proper use of the factor.
6. Provide a table of all emissions tests conducted at the facility for any reason, from January 1, 2006 to the present, and provide copies of all emissions test reports. Emission testing includes, but is not limited to, compliance testing, engineering testing, stack testing, capture efficiency testing, and testing for general information. The Report on Air Emissions Test Program dated December 16, 2011 may be omitted. Use the following guidelines for compiling the table and preparing copies of the test reports:
 - a. **Table:** Identify the emissions unit, the control device, the date of the test, the federal or state regulation requiring the test (if applicable), pollutants tested,

throughput during test, and the test method(s) used. For each test during which the source was not operating at maximum design capacity, provide an explanation for why production was limited. Indicate whether the report was shared with IEPA.

- b. **Copies:** Provide full stack test reports, including the summary pages, the section describing the process parameters and production or processing rates at the time of the test, all test runs, and all calculations
7. From January 1, 2011 to the present, provide the results of all indoor air quality tests performed at the facility. For each test result, document the location on a diagram of the facility from which the sample was obtained.
8. For furnace baghouses A37309 and A37348 provide, from January 1, 2011 to the present:
 - a. baghouse type (e.g., pulse jet);
 - b. fabric filter material used and manufacturer specifications;
 - c. baghouse capacity;
 - d. fan type(s) and capacities;
 - e. dates of installation of all improvements and modifications, and a narrative summary of the improvements and modifications made;
 - f. a list of all emissions units connected to the baghouses and a detailed explanation of how emissions are routed to them (such as via ducted pickup points, canopies, hoods, etc.). Include a description of any capture mechanisms, and the location of all devices used to measure air flow or pressure;
 - g. a detailed description of the method, frequency, and location of the disposal of spent or damaged bags;
 - h. all records of the differential pressure readings taken at each baghouse in an Excel Workbook or other compatible format, including the date and time of the readings;
 - i. all inspection, maintenance, and repair logs; and
 - j. a list of periods when an emission source was in operation, but either or both of baghouses were down. Provide this information in an Excel Workbook or other compatible format. For each period the baghouses were down, provide an explanation as to why it was down.
9. Provide all documents and data related to air flow and fan power data for each of the hoods associated with dust collectors A37348 and A37309 from January 1, 2011 to the present. Additionally provide all air flow and velocity data to the hoods associated with dust collectors A37348 and A37309.
10. Provide all ventilation studies or capture efficiency studies drafted, completed and implemented at the facility since January 1, 2006, including, but not limited to all induction furnaces, and pouring lines.
11. Provide copies of documents containing records of monthly operational inspections of all capture equipment associated with the melting area, including observations and any performance test or maintenance performed, from January 1, 2011 to the present.

12. Provide documentation of all malfunction, breakdown or failure events for dust collectors A37348 and A37309, including associated ducts and ventilation equipment from January 1, 2011 to the present.
13. Provide documentation on all repairs and maintenance performed on dust collectors A37348 and A37309 from January 1, 2011 to the present. Include date of event, accounts of equipment replaced or repaired, reason for repairs or maintenance and duration of event.
14. For Induction Furnaces M65007, M65010, and M66958 provide the following information:
 - a. maximum metal temperature (degrees F);
 - b. dimensions of furnace (height, width, diameter, etc. in feet);
 - c. height of hood above the furnace; and
 - d. dimensions of each furnace hood (height, width, depth, etc. in feet).
15. Provide the following information for the induction melt furnaces for all times that the emission units were operating during the period from January 1, 2011 to the present. Provide this information in an Excel Workbook or compatible format:
 - a. monthly production in tons for grey iron, including on a 12-month rolling basis;
 - b. monthly rolling average tap-to-tap cycle time for grey iron production;
 - c. monthly average production rate for brass and aluminum (tons/hour); and
 - d. monthly maximum and minimum production (tons/hour).
16. Provide the following information and related documents for all roof vents above induction furnaces in the melting area and line 7 pouring area from January 1, 2011 to the present, including:
 - a. number of vents and assigned facility number;
 - b. vent diameter and fan horsepower;
 - c. explanation of what emissions are vented;
 - d. types of pollutant including HAPs, that are vented;
 - e. amount of each pollutant (lb/hr, tons/year), along with supporting calculations and emissions factors with sources; and
 - f. all visible emissions opacity readings completed at any of the roof vent emissions points.
17. Provide all continuous emissions monitoring data (CEM) from January 1, 2011 to the present documents for East Triethylamine (TEA) scrubber. Provide this information in an Excel Workbook or compatible format.
18. For each of the mold cooling tunnels provide:
 - a. explanation of how the emissions are vented, including descriptions and documentation of any control and monitoring equipment in place;
 - b. composition of the vent stream;

- c. records of emissions amounts for each pollutant in the vent stream in (lb/hr and tons/year) in an Excel Workbook or compatible format; and
- d. emissions calculations for each of the mold cooling tunnels for each pollutant.

Appendix C

Confidential Business and Personal Privacy Information

Assertion Requirements

You may assert a business confidentiality claim covering any parts of the information requested in the attached Appendix B, as provided in 40 C.F.R. § 2.203(b).

Emission data provided under Section 114 of the CAA, 42 U.S.C. § 7414, is not entitled to confidential treatment under 40 C.F.R. Part 2.

“Emission data” means, with reference to any source of emissions of any substance into the air:

Information necessary to determine the identity, amount, frequency, concentration or other characteristics (to the extent related to air quality) of any emission which has been emitted by the source (or of any pollutant resulting from any emission by the source), or any combination of the foregoing;

Information necessary to determine the identity, amount, frequency, concentration or other characteristics (to the extent related to air quality) of the emissions which, under an applicable standard or limitation, the source was authorized to emit (including to the extent necessary for such purposes, a description of the manner and rate of operation of the source); and

A general description of the location and/or nature of the source to the extent necessary to identify the source and to distinguish it from other sources (including, to the extent necessary for such purposes, a description of the device, installation, or operation constituting the source).

40 C.F.R. § 2.301(a)(2)(i)(A), (B) and (C).

To make a confidentiality claim, submit the requested information and indicate that you are making a claim of confidentiality. Any document for which you make a claim of confidentiality should be marked by attaching a cover sheet stamped or typed with a caption or other suitable form of notice to indicate the intent to claim confidentiality. The stamped or typed caption or other suitable form of notice should employ language such as “trade secret” or “proprietary” or “company confidential” and indicate a date, if any, when the information should no longer be treated as confidential. Information covered by such a claim will be disclosed by EPA only to the extent permitted and by means of the procedures set forth at Section 114(c) of the CAA and 40 C.F.R Part 2. Allegedly confidential portions of otherwise non-confidential documents should be clearly identified. EPA will construe the failure to furnish a confidentiality claim with your response to the Request to Provide Information as a waiver of that claim, and the information may be made available to the public without further notice to you.

Determining Whether the Information is Entitled to Confidential Treatment

All confidentiality claims are subject to EPA verification and must be made in accordance with 40 C.F.R. § 2.208, which provides in part that you must satisfactorily show that you have taken reasonable measures to protect the confidentiality of the information and that you intend to continue to do so; that the information is not and has not been reasonably obtainable by legitimate means without your consent and that disclosure of the information is likely to cause substantial harm to your business's competitive position.

Pursuant to 40 C.F.R. Part 2, Subpart B, EPA may at any time send you a letter asking that you support your confidential business information (CBI) claim. If you receive such a letter, you must respond within the number of days specified by EPA. Failure to submit your comments within that time would be regarded as a waiver of your confidentiality claim or claims, and EPA may release the information. If you receive such a letter, EPA will ask you to specify which portions of the information you consider confidential **by page, paragraph, and sentence**. Any information not specifically identified as subject to a confidentiality claim may be disclosed to the requestor without further notice to you. For each item or class of information that you identify as being CBI, EPA will ask that you answer the following questions, giving as much detail as possible:

1. For what period of time do you request that the information be maintained as confidential, e.g., until a certain date, until the occurrence of a special event, or permanently? If the occurrence of a specific event will eliminate the need for confidentiality, please specify that event.
2. Information submitted to EPA becomes stale over time. Why should the information you claim as confidential be protected for the time period specified in your answer to question number 1?
3. What measures have you taken to protect the information claimed as confidential? Have you disclosed the information to anyone other than a governmental body or someone who is bound by an agreement not to disclose the information further? If so, why should the information still be considered confidential?
4. Is the information contained in any publicly available databases, promotional publications, annual reports or articles? Is there any means by which a member of the public could obtain access to the information? Is the information of a kind that you would customarily not release to the public?
5. Has any governmental body made a determination as to confidentiality of the information? If so, please attach a copy of the determination.
6. For each category of information claimed as confidential, **explain with specificity** why release of the information is likely to cause substantial harm to your competitive position. Explain the specific nature of those harmful effects, why they should be viewed as substantial and the causal relationship between disclosure and such harmful effects. How could your competitors make use of this information to your detriment?

7. Do you assert that the information is submitted on a voluntary or a mandatory basis? Please explain the reason for your assertion. If you assert that the information is voluntarily submitted information, explain whether and why disclosure of the information would tend to lessen the availability to EPA of similar information in the future.
8. Is there any other information you deem relevant to EPA's determination regarding your claim of business confidentiality?

If you receive a request for a substantiation letter from the EPA, **you bear the burden of substantiating your confidentiality claim.** Conclusory allegations will be given little or no weight in the determination. In substantiating your CBI claim(s), you must bracket all text so claimed and mark it "CBI." Information so designated will be disclosed by EPA only to the extent allowed by and by means of the procedures set forth in 40 C.F.R. Part 2, Subpart B. If you fail to claim the information as confidential, it may be made available to the public without further notice to you.

Personal Privacy Information

Please segregate any personnel, medical and similar files from your responses and include that information on a separate sheet(s) marked as "Personal Privacy Information." Disclosure of such information to the general public may constitute an invasion of privacy.

CERTIFICATE OF MAILING

I, Kathy Jones, certify that I sent a Request to Provide Information Pursuant to the Clean Air Act by Certified Mail, Return Receipt Requested, to:

Junling Qiu
Caterpillar Inc.
8826 West Route 24
Mapleton, IL, 61547

I also certify that I sent a copy of the Request to Provide Information Pursuant to the Clean Air Act by First-Class Mail to:

Eric Jones, Manager
Bureau of Air, Compliance and Enforcement
Illinois Environmental Protection Agency
P.O. Box 19506
Springfield, Illinois 62794

On the 3rd day of February 2016.

Kathy Jones

Kathy Jones, Program Technician
AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER:

7014 2870 0001 9577 8637